

### Warning Sign

Warning signs, which can be identified by the red-orange banner (as shown above), indicates that high-frequency RF producing equipment is nearby that exceeds occupational limits by at least ten times the permitted amount. If work is needed to be completed in an area where this sign is present, you must first contact Campus Operations. The owner of the RF equipment will need to be notified so that a service interruption can be arranged to isolate the energy of the device. BGSU Lockout Tagout (LOTO) procedures will be enacted once the power is shut off to the device. SOPs are still required even if the energy is completely isolated.

# **Emergency Contacts**

### **Questions?**

If you have any questions while planning safe work procedures around RF Equipment, you may contact your BGSU contact to help you throughout the process. If your request is urgent and your contact is not available, there is a list of resources printed below that you can use during an emergency.

### Campus Operations

Phone: 419-372-2251 Email: <u>facilities@bgsu.edu</u>

#### Design and Construction

Phone: 419-372-2511

Email: <u>designconst@bgsu.edu</u>

### Environmental Health and Safety

Phone: 419-372-2171 Email: envhs@bgsu.edu

ITS

Phone: 419-372-0999

Public Safety

Phone: 419-372-2346



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# Radiofrequency (RF) Safety Procedures

Department of Environmental Health and Safety

Bowling Green State University

## What is Radiofrequency (RF)?

Radiofrequency (RF) is defined as part of the non-ionizing electromagnetic spectrum (3 kHz-300 GHz). This means that RF produces electromagnetic radiation has less energy than infrared and more energy than that of power lines. If not monitored or handled properly, some health effects of prolonged exposure to RF include: burns, increased body temperature, and cancer. Types of RF equipment that may be found on-campus include: radio antennas, microwaves, and telecommunication towers. These devices, and their respective exposure limits, are regulated by the Federal Communications Commission (FCC).



DO	DO NOT
Review SOPs and	Perform work
Emergency	directly or walk in
Procedures (including	front of antennas
exit routes) prior to	
work	
Take frequent breaks	De-energize RF
in areas where RF is	equipment without
not present	authorization from
	owner and BGSU
Assume that all	Touch metal objects
antennas are active	surrounding RF
	devices
Obey all posted signs	Allow unauthorized
	personnel into the
	work area

## What can I do to protect myself?

By following Standard Operating Procedures (SOPs), you may be able to prevent or limit your exposure to RF. A more detailed list of SOPs can be found in the Radiofrequency Safety Program on the EH&S Webpage. Employees with implanted medical devices, such as pacemakers, should not perform work around RF equipment unless they are medically cleared by a doctor.

### **RF Postings and Procedures**

Federal regulations mandate that warning signs or postings are visible near the location of a RF producing device. The procedures that must be followed are dependent on what signage is available.



## **Notice Sign**

Notice signs, which can be identified by the blue banner (as shown above), indicates that a RF producing device is nearby. This sign indicates that the area is safe for occupational personnel but it may exceed exposure limits for the general public. It is recommended that SOPs are followed.



## **Caution Sign**

Caution signs, which can be identified by the yellow banner (as shown above), indicates that RF producing equipment is nearby that may meet or exceed occupational exposure limits. Before performing work around equipment that is marked with this sign, it is recommended to coordinate with Campus Operations to ensure that the proposed work is approved. EH&S can be consulted if questions arise regarding personnel safety.

When the permission to perform work is granted, SOPs should be followed. It is important to not walk directly in front of the antenna. Many buildings on campus have RF equipment mounted on elevated platforms above the rooftop level of the building. In most cases, working below RF equipment does not pose a significant exposure risk.